

Clarkson and colleagues that they do not use and would not even consider using a purified enzyme to treat fabric due to the cost of purification on a commercial scale. They only use a filtered culture broth of whatever fungus they are dealing with. So any cellulose or protease used in the work of Clarkson, et. al., is a crude enzyme in a culture broth which obviously contains many other components including other enzymes. While the cellulases and proteases used in the present work are highly purified enzymes. It is not possible to extrapolate from crude enzyme mixtures used on finished fabric (chemically treated) to highly purified enzymes used on raw fibers of various ages of maturity used to characterize the fiber wall.

#### **Response to Arguments**

5. The statement in Murray that "essentially pure cellulose" is produced is subject to question due to the fact that no one knows what is "essentially pure cellulose". This is due to the fact that there is no agreement in the literature as to just what is cellulose and that the presumed composition of cellulose can not be verified (Murray and Nichols, to be submitted 2009). Again, the arguments put forth in the prior response are reiterated. The whole field of cotton fiber and cellulose has run rampant with assumptions based on assumptions over the years since the discovery of cellulose in 1837 and it is now becoming very clear that many of those assumptions were unfounded.

I would ask that the argument filed regarding Murray be reconsidered as they appear to be even stronger now than when first advanced.

Respectfully submitted,



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